

### CATASTROPHE INSURANCE POLICY FOR CHINA

By Jun Wang

#### INTRODUCTION

The vast majority of China's population lies to the south-east of a line running from Beijing to Sichuan. This entire region is subjected to major floods each year, while typhoons affect the southern and eastern coastal areas and major earthquakes affect the western and northern margins. The average annual direct property damage is estimated at approximately USD 15 billion, and when

combined with other immediate economic losses, including business interruption, disaster relief, and other costs, is considerably larger.

As with other sectors, insurance in China is growing rapidly, with a compounded annual growth rate of 25 percent since 2001. The property insurance industry, nevertheless, is underdeveloped. Total property premiums in China are about USD 15 billion, whereas the losses from the Wenchuan Earthquake alone are likely to exceed USD 100 billion. According to most estimates, only 5 percent of property in China is insured, primarily among commercial and industrial users. When it comes to private dwellings, it is estimated that today only 1 out of 100 is insured against natural hazards. Clearly, the current property insurance market in China is dwarfed by the nation's need for catastrophe risk protection; at the present level of insurance penetration, China's insurance industry cannot provide significant compensation for large natural hazards losses.

#### CHINA CATASTROPHE INSURANCE NEEDS

Given the magnitude of potential loss, the adverse social and economic consequences of large natural catastrophes for millions of people, and the considerable fiscal strain imposed on the government budget by natural disasters, China can benefit significantly by putting in place a national catastrophe insurance system that would seamlessly

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combine disaster risk insurance with risk-reduction and risk-mitigation efforts. While such a system can take any of several forms, in the end it should achieve the following objectives:

- Reduce the financial vulnerability of homeowners as well as small and medium enterprises (SMEs) to natural disasters by providing access to affordably priced catastrophe insurance.
- Reduce the fiscal risk exposure of the government to natural disasters through a countrywide transfer of financial responsibility for losses to private assets to the private insurance industry.
- Create economic incentives for homeowners and SMEs to reduce their physical vulnerability to natural disasters over time by engaging in proactive ex ante disaster risk management.
- Provide for immediate post-disaster fiscal support for provincial governments to support the indigent and fund critical post-disaster infrastructure needs.
- An additional related objective and benefit would be fostering the growth of the domestic insurance industry.

### CHINA CATASTROPHE INSURANCE POLICY

Since a need for disaster insurance clearly exists in China and the capacity of the insurance industry is itself too small to undertake this task, the government could consider the creation of a national catastrophe insurance scheme, the China Catastrophe Insurance Pool (CCIP). The specific details for the CCIP would require technical analysis, but the outline for an overall policy for China is emerging.

### FUNDAMENTAL POLICY

The creation of a CCIP could either directly, or as a compulsory reinsurer, provide insurance for all private residential dwellings and all SMEs for major natural hazards in return for a premium. This generic model is already used in a wide range of countries and states (e.g., France, Japan, New Zealand, Turkey, and Califor-

nia) and has been successful. The CCIP would be:

- A public corporation managed by an independent board of directors with exemplary insurance, financial, and related industry experience. Directors would be independently nominated by several ministries (e.g., Ministry of Finance and Ministry of Civil Affairs), private industry, and the Chinese Academy of Sciences.
- Privately funded and financially self-sustainable, and managed according to sound actuarial practices and subject to government insurance regulations.<sup>1</sup>
- Effective in promoting ex ante risk reduction to individuals and communities.
- Established in a timely manner according to a schedule specified by the State Council.

### ELABORATION

**Participation:** Catastrophe insurance would be compulsory for every registered homeowner and SME. The most appropriate premium collection mechanism would need to be determined.

**Risks covered:** The CCIP would provide earthquake (and earthquake-initiated hazards such as tsunamis, landslides, and fires) coverage at the earliest opportunity, as fast as a program could be practicably created. Flood, wind, and other natural hazard coverage would be dependent on the development of technical data, and could be added in a timely manner on a schedule to be specified by the government. Floods, because of their unique characteristics, including scope for immediate post-disaster mitigation action and use of soft loans, could be handled through a separate arrangement but under the same administrative umbrella.

**Policy terms and conditions:** Coverage would be provided for damage to private residential dwellings and possibly contents as well as for damage to business premises. Several options exist, including: (i) policy limits similar to traditional insurance, with values set by the owner and confirmed by the underwriter; (ii) a flat minimum cover (e.g., c¥ 100,000) for all insured, with

higher limits as an option; and, (iii) an insured limit based on median property values in each participating province (or a similar formula). The best option should be identified by further study within the time limits specified by the government.

**Risk rating:** Risk-based pricing approach to risk, where the premium rates charged to homeowners would vary based on the location, size, and construction quality of their dwellings.

**Risk underwriting:** The compulsory insurance policies would be issued by participating insurance companies and backed by the CCIP, which would act as a special insurance entity established for the purpose of underwriting residential catastrophe insurance risk in the country. The CCIP would act as a national aggregator of catastrophe risk acquired from the sales of compulsory residential insurance policies. All aspects of its management and insurance operations would be outsourced to the private sector. The CCIP would be managed by a professional insurance services company hired through an open tender.

**Claims settlement:** In the aftermath of a natural disaster, property damages would be adjusted by participating insurance companies. To ensure consistency in loss assessments, adjusters would need to receive special training.

**The role of government:** The key elements of government participation would include: (i) introduction of special catastrophe insurance legislation; (ii) enforcement of the compulsory insurance requirement; and, (iii) provision of a backstop contingent capital facility to ensure the solvency of the program in case of highly unlikely catastrophic events.

**Risk financing:** The CCIP would rely heavily on private reinsurance and its own reserves, which would be built over time from its own earnings. The government would be required to provide a backstop liquidity facility to the CCIP to pay claims from highly unlikely catastrophic events.

**Incentives for mitigation:** To encourage communities

to engage in risk mitigation efforts, each local government would be required to adopt a disaster risk management plan. The insurance premium rates would reflect the progress achieved by communities in implementing their risk management programs.

**Subsidies:** The World Bank's accumulated knowledge of and experience in a wide range of countries indicates that inappropriate use of subsidies can easily undermine effective insurance arrangements. If subsidies are applied, they should be explicit (i.e., the full price of risk should be transparent) and well targeted to the truly needy.

## SOVEREIGN FISCAL HEDGING

The public and private sectors, as experience indicates, require completely separate arrangements. The post-disaster fiscal needs of governments have been met using financial instruments (i.e., the cases of Ethiopia, Malawi, and Mexico) and sovereign regional structures (i.e., Caribbean Catastrophe Risk Insurance Facility). Special legislation that deals exclusively with the post-disaster funding needs of the public sector would be an ideal way to address the post-disaster needs of provincial governments, reviewing modern risk hedging instruments.

## NEXT STEPS

Given the need for a national catastrophe insurance scheme, the Chinese government could consider promulgating framework catastrophe insurance legislation that states the fundamental principle for a catastrophe insurance program and appoints a special working group. The working group would be composed of key ministries, private industry, and technical experts to develop the specific operating procedures and norms for the CCIP in a timely manner. ■

## End Note

<sup>1</sup> In recognition of the different nature of catastrophe insurance from ordinary property insurance, a need exists for a separate specialized regulatory framework that would be implemented by specially trained professional regulators.



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